

# ENVIRONMENTAL RESOURCES

*The quality of life for future generations will be reflected in the quality of the natural environment left to them by present generations.*

*This section considers the place of environmental resources in fulfilling the Comprehensive Plan's vision for the city and county's future. The section includes an outline of the guiding principles for this element of the Plan, a review of the key environmental resource features, a discussion of the element's "Core Resource Imperatives," and a long range environmental natural resources planning and implementation approach with associated strategies, entitled "The Greenprint Challenge."*

## **G**UIDING PRINCIPLES

In addressing the future of the community's environmental resources, the following guiding principles should be considered:

### **MAINTAIN THE RICHNESS AND DIVERSITY OF THE COUNTY'S URBAN AND RURAL ENVIRONMENTS**

Lancaster County boasts a diverse set of environmental resources and landscape types that should be respected and maintained.

Lancaster County is home to a distinctive association of threatened and endangered species of plants and animals that represents a highly valued environmental legacy.

Environmental resources reside within a broad range of settings that should be considered as policy and development decisions are made.

### **BE BROADLY INCLUSIVE**

The impact of the actions taken by the community extend beyond the borders of Lancaster County, and oftentimes influence the natural resource features of adjacent counties, states, nations, and the world.

Urban and rural areas should receive equal priority in the planning process as the natural resources features are found throughout Lancaster County.

Public-private alliances and partnerships should be built upon, with an emphasis on the natural resources features rather than the patterns of ownership or land use on which the resources exist.

The community should capitalize upon both the environmental and economic benefits that the natural resources features provide.

## **FOCUS ATTENTION ON UNIQUE LANDSCAPES**

Signature landscapes provide visual images of the community's natural and cultural history and serve as a reminder of the ecosystem that forms the community's urban and rural economic base.

Signature landscapes will require thoughtful management if their long term viability is to be ensured.

## **E**NVIRONMENTAL RESOURCE FEATURES

Lancaster County lies within a large portion of the central plains of North America dominated by certain shared characteristics – e.g., topography, climate, soils, surface water, ground water, vegetation, and wildlife.

As a Comprehensive Plan land use category, “environmental resource features” represent an important part of today's urban and rural landscapes. Such features need to be valued and sustained as part of the overall planning process if they are to remain as vital parts of the natural heritage left for succeeding generations. These features help to define the County's unique sense of place — geographically, culturally, and temporally. The Plan fully recognizes the harmony and connections that exist within and between these features.

Thirteen separate environmental resource features are recognized in the Plan. They can be viewed individually in order to understand their importance and function in the natural environment, and to determine how actions taken as part of the planning and development process may impact or influence their future viability. Conversely, each resource feature can be viewed as joined together with others to form a comprehensive, interconnected system. Decisions, plans, and policies that are made regarding one resource feature will undoubtedly impact others – and it can often be hard to distinguish or understand these connections.

A brief description of each of the Plan's environmental resource features is provided below.

**Native Prairie** – This feature refers to the tallgrass prairie areas that are dominated by big bluestem, little bluestem, indiangrass, and sideoats grama grass species. Numerous wildflowers and forbs are also found in these prairies, including purple coneflower, purple prairie clover, and black-eyed susan. Though historically they were the region's prevailing natural condition, native prairies are an increasingly rare feature on the Nebraska landscape. Lancaster County is fortunate to have about 8,640 acres of native prairie remaining, although they are scattered throughout the county in patches of land that must remain whole if their integrity as a natural resource feature is to continue. Nine Mile Prairie and Spring Creek Prairie are two of the larger massings of native grasslands in the county.

**Saline Wetlands** – This feature refers to those locations in the county where wetlands having a high salt content can be found. Saline wetlands have four distinguishing characteristics: a type of soil usually associated with damp or soggy areas; the presence of water during most of the year; a high occurrence of saline (otherwise known as salt); and plants that are adapted to wet, salty soils. Eastern Nebraska saline wetlands are rare, with perhaps 1,200 acres remaining in the county. They tend to be found along Little Salt Creek and Rock Creek to the north and northeast of Lincoln. They provide habitat to a number of threatened and endangered species of plants and animals – the Salt Creek Tiger Beetle and the Salt Wort in particular.

**Parks, Trail Corridors and Other Recreational Areas** – While the Comprehensive Plan recognizes parks, trails, and recreational areas as a separate, distinctive land use category, they are an important part of the overall county's natural resource base. They include a diverse collection of sites and facilities owned, managed, and maintained by public entities and accessible to the general community. They accommodate a variety of recreational uses including

passive and active recreation, hunting, fishing, and boating.

**Floodplains** – This feature refers to land that is susceptible to flooding or that has flood prone soils. Floodplains provide multiple benefits to both the natural (flood storage, habitat, water quality) and built (recreation, public health and safety, economic) environments.

**Agricultural Lands** – This feature refers to land — about 77 percent of the county — utilized for growing crops, raising livestock, or producing other agricultural produce. Though agricultural activity is identified as a separate land use category in the Comprehensive Plan, agricultural land does constitute a distinctive natural resource feature as well. These lands are an integral element in the natural landscape providing habitat as well as being a basic piece of the County’s historic signature landscape.

**Cultural and Historic Landscapes** – This feature refers to places that are significant because of their unique character, because significant activities or events occurred at those sites, or because persons who have had a significant impact in culture are associated with the sites. As with several other natural resource features, Cultural and Historic Landscapes are also considered in other parts of the Comprehensive Plan. However, they individually and collectively add value to the community’s sense of place and hold an important place in affirming memorable images of the County’s heritage.

**Freshwater Wetlands** – This feature refers to areas that have hydric (i.e., water-bearing) soils, are frequently if not regularly moist, and are home to water tolerant plants. These types of wetlands are distinguished from “saline wetlands” by the lack of salt in the water that keep them wet. Freshwater wetlands are more prevalent in the county than are saline wetlands. This does not make them a less worthwhile natural resource feature as they provide important water quality and habitat functions. The use of many freshwater and saline wetlands are regulated under Section 404 of the Federal Clean Water Act.

**Riparian Areas** – This feature refers to spaces immediately adjacent to water courses on each side of a stream. They are most often located in the floodplain. They frequently contain a large amount of woody vegetation. Riparian areas can serve as linear connections between natural and built areas, as well as serve as boundaries and edges to a variety of adjacent land uses. They offer numerous benefits including flood storage, storm water conveyance, habitat, recreation, visual appeal, and shaded areas.

**Basins and Streams** – This feature refers to the region’s watersheds and the waterways they produce. These areas are demarcated by ridge lines that define the top of each basin. The primary basins and streams within Lancaster County include but are not limited to Salt Creek, Antelope Creek, Dead Man’s Run, Lynn Creek, Middle Creek, Haines Branch, Oak Creek, Stevens Creek, Beal Slough, and the upper tributaries of the Nemaha River. Most of the county is within the Salt Creek basin.

**Urban Forest** – This feature refers to the trees and other woody plants that have been planted or grow naturally within the limits of the communities in Lancaster County. Though many may not consider the urban forest to be part of the “natural environment,” it represents a significant community investment — exemplified in Lincoln being a “Tree City” — with its elimination or neglect having substantially detrimental consequences.

**Threatened and Endangered Species** – This feature refers to those plant and animal species who’s continued existence have been identified by Federal and/or State officials as being threatened or endangered. In Lancaster County these include the Salt Creek Tiger Beetle (State and Federal Endangered), Western Prairie Fringed Orchid (State and Federal Threatened), Saltwort or Western Glasswort (State Endangered), Least Bittern (State Threatened), and the Massasauga Rattle Snake (State Threatened). Other species having habitat or that have historically been found in Lancaster County include the Bald Eagle (State and Federal Threatened), River Otter (State Threatened), Small White Lady’s Finger Orchid (State Threatened), Topeka Shiner (State and Federal Endangered), and American Burying Beetle (State and Federal Threatened).

Views and Vistas – This feature refers to important or unique natural resources, places, structures, and landmarks. The views of these features can be from nearby or afar. Vistas refer to areas that afford significant views. Views and vistas provide key points of reference and help create the County’s signature landscape, such as the State Capitol.

Woodlands – This feature refers to the County’s natural wooded areas, especially those exhibiting bur oak/hickory associations. Woodlands in this context exclude the numerous stands of trees dominated by elm species, red cedar, mulberry, etc. This feature is also distinct from the riparian areas discussed earlier in this chapter.

## CORE RESOURCE IMPERATIVES

The thirteen resource features described above all represent greatly cherished elements of the city and county’s natural environment. Based upon further assessment and review of these features, three “Core Resource Imperatives” were identified. These imperatives were selected as those that should receive the greatest consideration in the long range planning process. Their selection does not mean that the other features are unimportant, inconsequential, or expendable.

The “Core Resource Imperatives” uniquely contribute to the natural resource heritage of the region and whose safeguarding for future generations is indispensable. The other features remain important to the long term environmental and economic viability of the community and should not be inordinately discounted.

The three “Core Resource Imperatives” called for in the Comprehensive Plan are as follows:

Saline and Freshwater Wetlands – Wetlands provide distinctive habitat opportunities for various plants and animals, as well as offering flood control and water filtration benefits. Lancaster County is home to about 1,200 acres of very rare Eastern Nebraska Saline Wetlands. These wetlands offer a specialized habitat to several threatened and endangered species, including the Saltwort and Salt Creek Tiger Beetle. Lancaster County is the only place in the world where the Tiger Beetle exists. Owing to a dwindling Beetle population and the growth of the city, the National Fish and Wildlife Service ~~is considering placing~~ has placed the Beetle on the Federal Threatened and Endangered Species list. ~~The City and County are investigating ways to~~ As a member of the Saline Wetland Conservation Partnership, the City of Lincoln and Lancaster County is working with the Lower Platte South NRD, NE Game and Parks Commission, The Nature Conservancy, and the USDA Natural Resource Conservation Service to develop management plans to help protect and preserve the unique habitat offered by the saline wetlands. This may include a blend of land uses stressing education, parks, floodplain, and low intensity development.

Native Prairies – Prior to the European settlement period, tallgrass prairies dominated the Nebraska landscape. Native prairie remnants remain scattered throughout the County, providing a home to numerous grasses, wildflowers and forbs. The remaining native prairies are becoming rarer and thus are increasing in value as an ecological amenity. The prairies are a key component of the signature landscape the first Europeans encountered when they settled in Nebraska and remain a visual clue to Lincoln and Lancaster County’s “sense of place.”

Riparian, Floodplains, and Stream Corridors – Streams and their adjoining corridors snake their way through much of Lancaster County. Throughout the region, surface water runoff flows into these stream corridors that typically consist of floodplains and riparian areas. These are instrumental in providing habitat and water infiltration benefits, along with serving as connectors to natural areas.

## THE GREENPRINT CHALLENGE: OVERVIEW

The purpose of the Comprehensive Plan’s Greenprint Challenge is to assure the long term health and integrity of the

ecosystem upon which Lancaster County is superimposed, and to capture the community-wide quality of life and economic benefits that can be derived from the area's environmental resource features.

Proper land use planning and plan implementation can aid in maintaining a healthy natural environment. While ultimately focusing on three "Core Resource Imperatives," the Greenprint Challenge offers a basis within which crucial planning decisions concerning the wide range of environmental resource features can be effectively pursued.

Five levels of green space comprise the basic structure within which to view the Greenprint Challenge. All five levels play an important role in helping the community experience and understand the benefits of environmental resources, and in advancing the value placed on these resources by the community today and into the future. The five Greenprint Challenge levels are as follows:

1. "Kitchen Window"

Every home and place of work is surrounded by some sort of green space. This includes planted vegetation, birds, animals, etc. At the lowest level, green space is the view from each and every window. That view should be an enjoyable one.

2. Parks, recreation areas, and green partitions

Parks, recreation areas, and green partitions between communities provide a diverse landscape important to a comfortable and acceptable community.

3. Urban forest

In its totality, the urban forest consists of all vegetation, insects, animal life, etc., in the city. The urban forest plays an important ecological as well as an aesthetic role.

4. Natural recreation areas

Disconnected or shielded from the community, these areas are set aside for the enjoyment of the natural environment. Hiker/biker trails and the Salt Valley Lakes are examples of such spaces.

5. Preserve ecological protection areas

Protect areas that are biologically interconnected to support bird, animal, and insect migration and supporting vegetation. Examples are stream beds and wooded corridors, prairie land, and saline wetlands.

## **T**HE GREENPRINT CHALLENGE: IMPLEMENTATION PRINCIPLES

The true challenge of the Greenprint Challenge will ultimately be its implementation. The principles to be followed in implementing the Greenprint Challenge are:

Seek early identification of areas to be preserved – While planning for future growth is integral to this Comprehensive Plan, it is equally important that environmental resource features be accorded similar attention. The community should invest planning resources into the early identification of those areas most valued as part of the Greenprint Challenge. This principle supports the notion of "getting ahead of the game" by knowing what resources are most valued, where they are located, and what actions should be made within the broader planning process to secure their future for the community.

Obtain reasonably constrained regulations – Maintaining a balance between the natural and human built environment is always a delicate one. Planning policy and regulatory approaches employed in achieving the Plan's Vision and Greenprint Challenge should strive to be effective, tempered, pragmatic, circumscribed, and respectful of private property rights.

Provide biological interconnection – Plants and animals do not exist in isolation. They interact with each other and reside within an integrated habitat. Implementation of the Comprehensive Plan needs to respect biological connections that exist today and provide responsive means for maintaining those associations.

Promote diversity of vegetation – Plants are a basic environmental building block. They provide habitat and food for animals, as well as aid in sustaining other vegetation that holds the soil and protects the water quality. Maintaining a diverse range of plants ultimately supports a healthier environment for all plants and animals.

Make “green space” an integral part of all environments – “Green space” can come in a wide variety of forms. The policies of the Comprehensive Plan should strive to incorporate such uses in the full range of urban and rural landscapes.

Prevent the creation of a “wall-to-wall city” through the use of green space partitions – As cities and villages expand, establishing corridors and districts of green should be part of the growth process. This often requires the advance delineation of these areas and the means for securing their on going maintenance.

Establish effective incentives for natural resource feature preservation – Securing the long term permanence of green space is a basic dilemma in natural resources planning. The use of “green space development incentives” (e.g., setting aside non-buildable areas, creating green space preserves, density bonuses) should be a primary consideration in implementing this Plan.

## **T**HE GREENPRINT CHALLENGE: IMPLEMENTATION STRATEGIES

Strategies for implementing the Greenprint Challenge are presented below within five major groupings:

- Environmental Resource Features
- Comprehensive Planning
- Current Planning and Development
- Program Implementation and Funding
- Public Agency Administration

### **ENVIRONMENTAL RESOURCE FEATURES**

#### *Wetlands: Saline and Fresh Water*

Provide appropriate incentives — in addition to regulatory mechanisms such as the Federal Section 404 process — to encourage landowners to preserve saline and freshwater wetlands. Incentives to be used or considered further include: (a) fast track approval of developments that preserve and protect this resource; (b) special density credits or bonuses within a Community Unit Plan for wetland conservation; (c) special allowances under provisions of contract zoning; (d) transfer of development rights; (e) wetland bank mitigation; (f) technical assistance for wetland preservation and enhancement; and (g) conservation easements with tax incentives.

Research and seek implementation of procedures for managing lands containing and that are located near saline wetlands. Desirably this research would be conducted at the watershed level to provide a broad perspective of how area-wide development will interact with this natural resource. A special treatment buffer along the perimeter of saline wetlands could reduce the impact of increased runoff, sedimentation, and other pollutants. Such buffers could also serve to provide support for the preservation of habitat areas for the county’s threatened and endangered species.

Pursue stormwater management practices that consider both water quality and quantity approaches near fresh water wetlands. Buffer areas should be encouraged at their perimeters to decrease the effects of adjacent future uses.

### *Salt Creek Tiger Beetle*

In conjunction with research into saline wetland preservation, determine measures that could be taken to enhance and maintain these areas as Salt Creek Tiger Beetle habitat. This may include authorizing or soliciting funding for hydrology or hydrogeology research of the habitat area, determining basin-wide impacts of land use and human activities on the wetlands, characterizing the Tiger Beetle's biology and habitat, and assessing the economic impacts of potential management efforts. A management recovery plan for the Salt Creek ~~Watershed and Tiger Beetle habitat~~ should be prepared by December, 2002, is being prepared by the US Fish and Wildlife Service and should be completed by 2007. A critical habitat determination is expected to follow the plan.

~~Identify Landowners in the specifically targeted saline wetlands and accompanying 500 foot buffer zones in the Comprehensive Plan until additional zone areas identified by baseline research can be completed. This can be a first step in initiating on-going formal partnerships between the City and other entities to address saline wetland protection. Landowners in the area should be offered assistance concerning existing programs to preserve wetlands and transition lands occurring on private property.~~

~~Prioritize land acquisition in the Salt Creek Watershed that protects Tiger Beetle habitat. Also~~ Continue to investigate incentives allowing land owners to pursue voluntary purchases, conservation easements, or other similar preservation options according to the completed land acquisition prioritization.

Continue to explore grant opportunities for saline wetland preservation and enhancement.

~~Coordinate planning for Tiger Beetle and saline wetland protection with the Mayor's Floodplain Task Force.~~

Seek better coordination (or centralization) of development and construction permits so a more effective assessment can be made of any development plans that might negatively impact Tiger Beetle habitat.

~~Initiate a~~ Continue the public education effort to raise awareness of the Salt Creek Tiger Beetle and its unique habitat.

### *Native Prairies and Grasslands*

Develop planning guidelines, management techniques and supporting policies for preserving native prairies and grassland. For example, these areas remain healthiest when periodic burning is done to support plant regeneration. Notification to adjacent property owners of possible burnings and smoke occurrences must occur as title to property changes. Research into such issues should examine how the implementation of necessary management guidelines can best occur; particularly options for balancing the inherent needs of natural resources features (such as grasslands) with surrounding properties.

Investigate means for encouraging native prairie restoration by private entities.

Utilize the University of Nebraska Center for Grassland Studies in assessing alternatives for grassland preservation and restoration.

### *Greenways and Open Spaces: General*

Continue to develop a county-wide parks and open space plan as identified on the Parks Master Plan Map. (Also see the strategies discussed under Public Agency Administration.) \*\*Insert Parks Master Plan Map\*\*

Continue development of the "Crescent Green" concept to provide a continuous greenway and open space corridor around the west and northern part of Lincoln.

Encourage linear connection of green spaces where possible. Efforts should be made to preserve small stream corridors throughout future developments. When the new crossings of riparian ways are proposed or existing ones expanded, care should be given to ensure that the connectivity is not diminished.

Pursue Greenways connecting urban and rural areas. Such corridors should follow stream courses (particularly along floodplains) and connect valuable resource areas (such as the Salt Valley Lakes, points with special vistas or views, prairie grasslands, cultural and historic sites, and the county's towns and villages).

Ensure that as greenways and open space corridors are identified and created, provisions are made for possible future access points across these areas. This may include, but not be limited to, access for new road alignments, road widenings, utilities, and other similar services.

Buffer areas should be sought, as ecologically appropriate, along Greenway stream corridors with significant natural values worthy of continued preservation, and/or to decrease impacts from adjacent future land uses; such impacts may include natural areas protection strategies and/or stormwater management considerations. Further the continued development of the urban forest through design standards and other current planning mechanisms.

Preserve existing tree masses as much as possible by integrating them into future development plans.

Implement a "Rain to Recreation" watershed approach to reduce flood damages, protect water quality and natural areas, while providing for recreational and educational opportunities so as to realize multiple benefits.

#### *Greenways and Open Space: Salt Creek South/Wilderness Park*

Pursue the acquisition of additional greenway south from Saltillo Road along Salt Creek. This future greenway should generally follow the 100-year floodplain along Salt Creek, and incorporate the right-of-way of the abandoned Union Pacific rail line. This area could eventually connect a network of trails that would extend into northern Kansas. This extension may be accomplished through a combination of land purchases, conservation easements, donations, and other options.

Work with other incorporated communities within the county — notably Roca and Hickman — to coordinate the Greenway's extension.

#### *Greenways and Open Space: Salt Valley Heritage Greenway*

The Salt Valley Heritage Greenway is a proposed continuous open space "loop" around Lincoln providing a connection with both the urban and rural communities. The Greenway is envisioned to be comprised of conservation easements and fee simple acquisition of selected sites with unique environmental features or recreational opportunities. It would include parks and open space, trails, both active and resource-based recreation, riparian and stream corridors, floodplains, saline and freshwater wetlands, agricultural land, signature landscapes, wildlife corridors, lakes and streams, abandoned rail lines, and transportation corridors. It could be as narrow as a few hundred feet in some places to as wide as a mile around state recreation areas.

This corridor would include the Crescent Green linear greenway along Salt Creek beginning on the north and then proceeding along Salt Creek on the west, including Wilderness Park. It would proceed south of Wilderness Park along the Salt Creek floodplain connecting with the community of Roca. It would follow the Hickman Branch south of Roca and proceed east connecting with the community of Hickman. From Hickman, the corridor would proceed easterly connecting with Wagon Train Lake tributary to the South Beltway. Following linear open space along the South Beltway east and then north along the East Beltway to the Stevens Creek connection near Walton. The Greenway would follow the Stevens Creek corridor to the north and connect back in with Salt Creek including saline



wetlands, Salt Creek Tiger Beetle habitat and the Crescent Green Corridor on the north, forming a continuous open space system.

The Salt Valley Heritage Greenway would provide connectivity with current and future green corridors that extend out from Lincoln such as the MoPac Trail corridor, Murdock Trail corridor, Antelope Valley, Dietrich Bikeway, and Antelope Creek Trail Corridor. It would provide a destination for additional trails as Lincoln continues to grow. The Greenway would also provide access to green corridors that then would extend out into the county to State Recreation Areas (SRA) and natural resource areas and beyond including the following:

- Cardwell Branch corridor to Yankee Hill SRA
- Middle Creek corridor to Pawnee SRA
- Haines Branch corridor to Conestoga SRA
- Salt Creek corridor to Killdeer and Bluestem SRA
- Oak Creek corridor to Branched Oak Lake
- Salt Creek corridor east and up the Rock Creek corridor

The Salt Valley Heritage Greenway would also provide connectivity with the Homestead Trail that goes to Beatrice and south to Kansas. It would connect with additional rail lines that are acquired for trails in the future.

Use the Salt Valley Heritage Greenway concept to embody the Comprehensive Plan's Vision and environmental resource guiding principles, including:

- Conserve flood-prone areas for storm water management
- Preserve signature landscapes
- Create a continuous commuter and recreational trail loop
- Connect urban neighborhoods, as well as urban and rural areas with unbroken corridors of open space
- Provide links of wildlife habitat and movement areas
- Enhance the value of properties adjacent to and served by the Greenway

Develop a strategic plan for acquiring and conserving lands within the Salt Valley Heritage Greenway corridor through cooperative efforts of public agencies, private organizations, and individuals.

Prepare and distribute information to community residents regarding the functions and value of the Salt Valley Heritage Greenway, and of the plans for its creation.

Identify and pursue funding sources for the acquisition of significant properties forming the Greenway.

Coordinate the planning of the Salt Valley Heritage Greenway with county-wide trails planning and any other relevant on-going planning activities.

### *Greenways and Open Space: South and East Beltways*

Explore alternatives for creating a greenway corridor along the South and East Beltways. This work would occur as the more detailed planning of those facilities takes place. The activities could range from park-like areas existing today along Interstate 180 and Highway 2 in Lincoln, to more riparian settings as are found in Wilderness Park and the Crescent Green areas. The corridor could connect with historic and cultural assets, regional and community parks, lakes, and other recreational areas. It could also provide potential habitat and corridors for animal movement.

### *Greenway and Open Space: I-80 Corridor (N. 27th to Waverly)*

Continue the advancement of the greenway corridor along Interstate 80, between North 27th Street and the City of Waverly. This corridor already includes a number of wetland areas (both saline and fresh water) that are under public ownership – City of Lincoln and the Lower Platte South Natural Resources District in particular. The corridor contains the Warner Wetlands and City's wetlands mitigation bank. The area is a major entryway into the City of Lincoln and provides associated trail and open space opportunities.

### *Greenways and Open Space: Stevens Creek Basin*

Seek the early acquisition (or the application of other management techniques) of land along Stevens Creek and within the Stevens Creek Basin for future greenways, open space and park uses. Examine possible park and open space potential around Walton where the MoPac and future Stevens Creek Trails will connect.

### *Greenways and Open Space: Haines Branch Corridor*

Enhance the Haines Branch Corridor extending from the City to Pioneers Park, and then to Conestoga Lake. This includes accenting the visual appeal from and of the Bison Trail. From Conestoga, there is the opportunity to connect with the Village of Denton, and then south along the riparian corridor to the Spring Creek Nature Center.

### *Greenways and Open Space: Trails in General*

Pursue the active coordination of all future trail network extensions and enhancements. The urban network of trails should connect employment centers, shopping areas, schools, and residential neighborhoods. Trails should be an integral part of the community's green spaces and corridors. (See Transportation section of the Plan.)

Seek establishment of trail easements or comparable options along selected county roads. (See Transportation ~~Future~~ section of the Plan.)

Endeavor to acquire abandoned rail lines for trails as part of an overall open space and recreation system for the county. These may include the Union Pacific line running north-northwest out of Lincoln to Valparaiso and Wahoo, and the Lincoln to Nebraska City Burlington Northern line. ~~and the Union Pacific line north of the Jamaica junction and running north toward the Haymarket area in Downtown Lincoln.~~

### *Floodplains*

In April of 2003, the Mayor's Floodplain Task Force developed policy standards for floodplains that took into consideration the natural functions played by these areas. These policy recommendations have been incorporated into the watershed management strategies included in the Utilities section of the Comprehensive Plan. Many recommendations have also been incorporated into the zoning and subdivision codes.

Seek the routine use of "Best Management Practices" in implementing stormwater management policy so that the potential for sedimentation problems are minimized.

Further discussion of floodplain and stormwater management considerations and strategies is provided within the Utilities section.

### *Views and Vistas*

Investigate the availability of several locations in the county that offer distinguished views and vistas. These could be acquired through fee simple title or easements. Many of these locations may be appropriate for public ownership

as future parks or open space. Efforts should be made to acquire these parcels should they become available.

### *Unique Features*

Inventory and pursue the preservation of unique features to provide special educational and interpretive opportunities. These include quarries and areas of geological significance, remnants of historic trails, unique bluffs near Bennet, the sandstone prairies, a small waterfall south of Denton, and historic pits and grasslands around Hickman and Roca.

## **COMPREHENSIVE PLANNING**

Integrate the “Core Resource Imperatives” and natural resource feature concepts into future city and county studies that implement the Comprehensive Plan. Examples of such studies would be watershed master plans, subarea plans, transportation planning studies, utility master plans, wetland bank development analysis, and floodplain management studies.

Incorporate scientific data on flora, fauna, geology and other natural resources features into the Planning Department’s “Natural Resources-Geographic Information Systems” (NR-GIS) database. This may include the targeted collection of pertinent baseline data on plants and wildlife.

Document historic, cultural and archeological sites throughout the city and county.

Research the long term land value effects of natural areas and parks on adjacent uses.

## **CURRENT PLANNING AND DEVELOPMENT**

Include the consideration of the “Core Resource Imperatives” and other natural resource features in the plan review process — i.e., subdivision plats, changes of zone, use permits, etc. This may involve preparing written guidelines for looking at site vulnerability, habitat fragmentation, long term land manageability, green space connectedness, and other elements that implement the Plan’s natural resources concepts.

Update City and County zoning and subdivision regulations to encourage the application of concepts identified in the environmental resources section of the Comprehensive Plan Vision.

Develop and adopt planning policies and procedures for acreage developments that are consistent with the environmental resources Vision of the Comprehensive Plan.

Where setback and buffer provisions are provided for, the Planning Commission will consider requests for exception only if no economically viable use allowed within the designated area could occur as a result of the application of the setback and buffer provision, and that this circumstance is not purposefully brought about by any deliberate action of the owner or developer of the property.

## **PROGRAM IMPLEMENTATION AND FUNDING**

Investigate the possible use of easements (e.g., conservation, preservation, public access, etc.), incentives (e.g., density bonuses, conservation overlay zones, buffer/transition zones), purchases (e.g., development rights, land acquisition), and impact fees to manage land with environmental resource interest.

Investigate the establishment of a land trust to enable donations of land and funding to occur on a systematic basis. This may include encouraging estate planning to support further expansion of environmental resource areas in the county.

Conduct outreach efforts bringing together private land owners, environmental interests, and the development community to seek a common understanding and approach regarding natural resource features and the vision described in this Plan.

Develop a capital improvements programming approach providing for further acquisition of park property and natural areas to ensure the preservation and protection of sensitive environmental features.

Pursue a variety of grant funding sources on a continuing basis. These may include the Land and Water Conservation Fund, various floodplain and water quality funding programs, and the Nebraska Environmental Trust.

Cooperatively plan for the long term preservation of existing and future public and private conservation areas.

Lend policy support to Federal and State programs retaining land in agricultural production.

## **PUBLIC AGENCY ADMINISTRATION**

Determine the appropriate agency or agencies to manage and/or hold title to resources obtained through the Greenprint Challenge implementation process. Although it is envisioned that many of these resources will remain in private ownership with special protections, public acquisition of property and/or easements will also need to be employed.

Identify a governmental entity with specific authority to maintain and operate a parks and recreation program and natural areas at the county level. This structure may involve existing agencies, reflecting a modification in current responsibilities and authorities. The entity should have clear responsibility to act both inside and outside the City of Lincoln and its extra-territorial limits.